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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,642	12/08/2003	Darrel J. Van Buer	GP-303047	3016
7590 02/25/2005		EXAMINER		
KATHRYN A MARRA			NGUYEN, CUONG H	
General Motors Corporation Legal Staff, Mail Code 482-C23-B21 P.O. Box 300 Detroit, MI 48265-3000			ART UNIT	PAPER NUMBER
			3661	
			DATE MAILED: 02/25/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)
^		10/730,642	VAN BUER ET AL.
10	Office Action Summary	Examiner	Art Unit
		CUONG H. NGUYEN	3661
Period fo	The MAILING DATE of this communication apr Reply	ppears on the cover sheet with the	correspondence address
THE N - Exten after S - If the - If NO - Failur Any re	DRTENED STATUTORY PERIOD FOR REP MAILING DATE OF THIS COMMUNICATION is ions of time may be available under the provisions of 37 CFR 1 SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a reperiod for reply is specified above, the maximum statutory perion to reply within the set or extended period for reply will, by statuably received by the Office later than three months after the mailed patent term adjustment. See 37 CFR 1.704(b).	. 136(a). In no event, however, may a reply be tile. In the statutory minimum of thirty (30) daily deply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE.	mely filed ys will be considered timely. n the mailing date of this communication. ED (35 U.S.C. § 133).
Status			
2a)☐ 3)☐	Since this application is in condition for allow	is action is non-final. ance except for formal matters, pr	
	closed in accordance with the practice under	Ex parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.
Dispositi	on of Claims		
5)□ 6)⊠ 7)□	Claim(s) 1-22 is/are pending in the application  4a) Of the above claim(s) is/are withdre  Claim(s) is/are allowed.  Claim(s) 1-22 is/are rejected.  Claim(s) is/are objected to.  Claim(s) are subject to restriction and	awn from consideration.	
Application	on Papers		
10) 🖾 -	The specification is objected to by the Examir The drawing(s) filed on <u>08 December 2003</u> is Applicant may not request that any objection to th Replacement drawing sheet(s) including the corre The oath or declaration is objected to by the I	/are: a)⊠ accepted or b)⊡ object e drawing(s) be held in abeyance. Se ection is required if the drawing(s) is ob	ee 37 CFR 1.85(a). Djected to. See 37 CFR 1.121(d).
Priority u	nder 35 U.S.C. § 119		
a)[	Acknowledgment is made of a claim for foreignal All b) Some * c) None of:  1. Certified copies of the priority documents.  2. Certified copies of the priority documents.  3. Copies of the certified copies of the priority application from the International Burestee the attached detailed Office action for a list	nts have been received. nts have been received in Applicationity documents have been receivau (PCT Rule 17.2(a)).	tion No red in this National Stage
Attachment —	• •		
2) 🔲 Notice 3) 🔯 Inforn	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/03 No(s)/Mail Date <u>12/08/03</u> .	4) Interview Summan Paper No(s)/Mail D 8) 5) Notice of Informal 6) Other:	

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## Status of the claims

1. Claims 1-22 are currently pending; 1 page of IDS was received.

#### Drawing

2. This application has been filed with 4 sheets of formal drawings, and they are accepted for examinations.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraph of 35 U.S.C. § 102 in view of the AIPA and H.R. 2215 that forms the basis for the rejections under this section made in the attached Office action:

#### A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

35 U.S.C. § 102(e), as revised by the AIPA and H.R. 2215, applies to all qualifying references, except when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. For such patents, the prior art date is determined under 35 U.S.C. § 102(e) as it existed prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. § 102(e)).

- 3. Claims 1, 7-16, 18-20, and 22 are rejected under 35
- U.S.C. 102(e) as being anticipated by Jones (US Pat. 6,748,318).
- A. As to independent claim 1: Jones teaches a method for predicting vehicle operator destinations, comprising:
- receiving vehicle position data (see Jones, Fig.2, ref.25);
- comparing said data for a current trip to vehicle position data for a previous trip (see Jones, 19:64 to 20:10); and

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mapping a path to a destination (see Jones, 19:58 to 20:10).

B. As to dependent claim 7: Jones teaches that position data

includes navigation coordinates (see Jones, Fig.14 ref. 604).

- C. As to independent claim 8: Jones teaches said navigation coordinates are GPS coordinates (see Jones, Fig.14 ref. 604).
- <u>D. As to claim 9</u>: Jones teaches that vehicle position data includes a time stamp, a date stamp and navigation coordinates (see Jones, Fig.14 ref. 601, 18:30-31).
- E. As to claim 10: Jones teaches that vehicle position data include a vehicle heading/direction, and a vehicle speed (please note that a vehicle's speed is derived knowing distance & time traveled see Jones, 22:35-43, 32:13-22, and 34:38-52).
- <u>F. As to claim 11</u>: Jones teaches that communicating to an operator of said vehicle responsive to said suggesting/route planning (inherently in Jones, Fig.3 ref.75).
- G. As to claim 12: Jones teaches that communicating is responsive to vehicle data (see Jones, Fig.2 ref. 12).
- H. As to claim 13: Jones teaches that communicating is further responsive to environment data (i.e., traffic jam/adverse weather problems, see Jones 2:9-22).
- I. As to claim 14: Jones teaches that communicating to a telematic service (see Jones, Fig.2 ref. 25).

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- J. As to claim 15: Jones teaches that telematic service is one or more of navigation, traffic, and weather .et. (see Jones, Fig.2 ref. 25).
- K. As to claim 16: Jones teaches that receiving occurs once during each time interval (see Jones, Fig.14 ref. 605).
- L. As to claim 18: Jones teaches a vehicle is an automobile (see Jones, Fig.1 ref. 19).
- M. As to independent claims 19, 22: Jones teaches a system for predicting vehicle operator destinations, comprising:
- a navigation device (see Jones, Fig.1 ref. 25);
  a storage device (see Jones, Fig.1 ref. 14 "BASE STATION
  CONTROL UNIT");
- a microprocessor in communication with said navigation device and said storage device (see Jones, Fig.1 ref. 10), said microprocessor including instructions to implement the method comprising:
- receiving vehicle position data for a vehicle via said navigation device (see Jones, Fig. 3 ref. 70);
- comparing said vehicle position data for a current trip to vehicle position data for a previous trip to predict a destination for said vehicle (this portion is similar AS CLAIM 1(b)'S LIMITATION; therefore, similar rationales and reference set forth are applied), said vehicle position data for a

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previous trip stored in said storage device (see Jones, Fig.1 ref. 14 "BASE STATION CONTROL UNIT"); and

- suggesting a path to said destination (this limitation is similar as a limitation of claim 1c).

N. As to claim 20: Jones teaches a navigation device is a GPS receiver (see Jones, Fig.14 ref. 604).

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 2-6, 17, and 21 are rejected under 35 U.S.C. § 103 as being unpatentable over Jones (US Pat. 6,748,318) in view of Fuchs et al. (US Pat. 6,567,745).

The rationales and reference for rejection of claim 1 are incorporated.

A. As to claims 2, 5: Jones does not disclose that pattern recognition technology is used for predicting a vehicle destination/driver's behavior.

However, it is obvious that a comparison includes performing event categorization and pattern recognition (i.e.,

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weekday trip vs. weekend trip; stopping at 7-11 for coffee in weekday vs. stopping at church for masses in weekend.

Jones does not disclose that pattern-recognition technology is used for predicting a vehicle destination.

However, Fuchs et al. apply that technology in a global positioning environment (see Fuchs et al., 3:5-12).

B. As to claim 3: Jones does not expressly identifying transitions between a being stop and being running condition of a vehicle.

However, it is old and well-known to detect a vehicle condition with the GPS by duration it stops/"NOT MOVING" and being underway/"BEING RUNNING"; therefore, one can know this "MOVING/STOPPING" condition by seeing if vehicle coordinates change in a predetermined time (e.g., it is reasonable to determine "MOVING/STOPPING" conditions with database tables of Jones'Fig.14 - it is obvious to use this database for knowing if a vehicle is "MOVING/STOPPING").

C. As to claim 4: Jones does not expressly disclose a pattern recognition technique by combining data of a current trip and a previous trip.

However, it is reasonable to have those information from Jones'Fig.14 for comparison since Jones uses this database for records.

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D. As to claim 6: The rationales and reference for an obviousness rejection because claim 6 contains similar limitations of claims 3 & 4 (i.e., a previous trip includes a starting time and location, an ending time and location, and route data including previous position data (see Jones, Fig.14).

- E. As to claim 17: The examiner submits that it is obvious to receiving a vehicle position data in response to said vehicle moving a pre-selected distance (see Jones, Fig.16).
- F. As to claim 21: The examiner submits that it is old to build a storage device located within a microprocessor (e.g., a microprocessor can has its own built-in memory by integration of available electronic devices).

# 5. Related prior art:

- O'Neal, (US Pat. 4,359,733) teaches about comparing position data of a vehicle, where the position data just calculated is compared with position data that was previously calculated for the same aircraft and stored at a number of reserved locations in the identified memory data block; the results of this comparison are used to obtain the speed, and true course of the vehicle based on the time elapsed between successive position calculations.

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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CUONG H. NGUYEN whose telephone number is 703-305-4553. The examiner can normally be reached on 7am - 3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas G. Black can be reached on 703-305-8233. The fax phone number for the organization where this application is assigned is 703-305-7687.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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